



WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SIOW
- Gas D&A ENHR SIGW
- OG GSW Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- Deepening Re-perf. Conv. to ENHR Conv. to SWD
- Conv. to GSW
- Plug Back: _____ Plug Back Total Depth _____
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite: _____

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Letter of Confidentiality Received
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____



1053875

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i> List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
_____ Perforate _____ Protect Casing _____ Plug Back TD _____ Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR. _____ Producing Method: Flowing Pumping Gas Lift Other *(Explain)* _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
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DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: _____ _____
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ALLIED CEMENTING CO., LLC. 040079

Federal Tax I.D.# 20-5975804

MAIL TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT:

*Medicine Lodge KS
Sat*

DATE <i>02-11-11</i>	SEC. <i>12</i>	TWP. <i>30s</i>	RANGE <i>08w</i>	CALLED OUT	ON LOCATION	JOB START	JOB FINISH <i>10:05 AM</i>
LEASE <i>Young</i>	WELL# <i>A-2</i>	LOCATION <i>Spivey, KS, 1/2 E, S & E/into</i>			COUNTY <i>Kingman</i>	STATE <i>KS</i>	
OLD OR NEW (Circle one)							

CONTRACTOR *Pickrell #1*

TYPE OF JOB *Surface*

HOLE SIZE *12 1/4* T.D. *286*

CASING SIZE *8 5/8* 23# DEPTH *280*

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX *300* MINIMUM

MEAS. LINE SHOE JOINT *N/A*

CEMENT LEFT IN CSG. *20'*

PERFS.

DISPLACEMENT *16 1/2 Bbls Fresh H₂O*

OWNER *Pickrell*

CEMENT

AMOUNT ORDERED *340sx 60:40:2%gel + 3%cc (Used 340sx)*

COMMON <i>A</i>	<i>204</i> sx	@ <i>15 42</i>	<i>3151 80</i>
POZMIX	<i>136</i> sx	@ <i>8 00</i>	<i>1088 00</i>
GEL	<i>6</i> sx	@ <i>20 80</i>	<i>124 80</i>
CHLORIDE	<i>11</i> sx	@ <i>58 20</i>	<i>640 20</i>
ASC		@	
		@	
		@	
		@	
		@	
		@	
		@	
		@	
HANDLING	<i>357</i>	@ <i>2 40</i>	<i>856 80</i>
MILEAGE	<i>357-10/35</i>		<i>1249 50</i>
TOTAL			<i>7111 10</i>

REMARKS:

Pipe on Btm, Break Line, Pump Spacers, Mix 340 sx 60:40 cement Blend, Stop Pump, Release Plug, Start Disp. w/ Fresh H₂O Wash up on Plug, See Steady increase in PST, slow rate, Stop Pump at 16 1/2 Bbls total Disp., Shut in, Cement Did Cure.

SERVICE

DEPTH OF JOB	<i>280</i>		
PUMP TRUCK CHARGE		@ <i>10 18 00</i>	
EXTRA FOOTAGE		@	
MILEAGE	<i>35</i>	@ <i>7 00</i>	<i>245 00</i>
MANIFOLD <i>Headrental</i>		@	
		@	
		@	

CHARGE TO: *Pickrell*

STREET

CITY STATE ZIP

TOTAL *1263 10*

PLUG & FLOAT EQUIPMENT

<i>1-TWP</i>	@	<i>68 00</i>
	@	
	@	
	@	

To Allied Cementing Co., LLC.
You are hereby requested to rent cementing equipment

ALLIED CEMENTING CO., LLC. 040651

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT:
Melchior Ladsoes

DATE <u>2-22-11</u>	SEC. <u>12</u>	TWP. <u>30s</u>	RANGE <u>8w</u>	CALLED OUT	ON LOCATION	JOB START <u>9:00pm</u>	JOB FINISH <u>10:30pm</u>
LEASE <u>Yang</u>	WELL # <u>A-2</u>	LOCATION <u>Spicy, KS, 1/2 E, S+E into</u>			COUNTY <u>Kingman</u>	STATE <u>KS</u>	
OLD OR <u>NEW</u> (Circle one)							

CONTRACTOR Pickrell Rig #1
 TYPE OF JOB Production
 HOLE SIZE 7 7/8 T.D. 4200'
 CASING SIZE 4 1/2 DEPTH 4205'
 TUBING SIZE DEPTH
 DRILL PIPE DEPTH
 TOOL DEPTH
 PRES. MAX MINIMUM
 MEAS. LINE SHOE JOINT 24'
 CEMENT LEFT IN CSG. 24'
 PERFS.
 DISPLACEMENT 67 1/2 bbls 2% KCL

OWNER Pickrell Drilling
 CEMENT
 AMOUNT ORDERED 25 sk 60:40:4% gel
125 sk class A + 10% salt + 5% Kcl seal

EQUIPMENT
 PUMP TRUCK CEMENTER Melchior
 # 414/302 HELPER Ron Gately
 BULK TRUCK
 # 364 DRIVER Raymond R.
 BULK TRUCK
 # DRIVER

COMMON	<u>A 140</u>	<u>sk</u>	@ <u>15 45</u>	<u>2163.00</u>
POZMIX	<u>10</u>	<u>sk</u>	@ <u>8 00</u>	<u>80.00</u>
GEL	<u>1</u>	<u>sk</u>	@ <u>20 80</u>	<u>20.80</u>
CHLORIDE			@	
<u>SALT</u>	<u>12.5</u>	<u>sk</u>	@ <u>12.00</u>	<u>150.00</u>
<u>Kolseal 625</u>			@ <u>89</u>	<u>556.25</u>
<u>Clapro 7 Gals</u>			@ <u>31.25</u>	<u>218.75</u>
<u>WF2-2 500 Gal</u>			@ <u>1.27</u>	<u>635.00</u>
			@	
			@	
			@	
			@	
HANDLING	<u>175</u>		@ <u>2.40</u>	<u>420.00</u>
MILEAGE	<u>175/35</u>		@ <u>1.0</u>	<u>612.50</u>
				TOTAL <u>4856.30</u>

REMARKS:
Back circulation with Rig, pump ball through
pump 3 bbls H2O, pump 500 gal ASF, pump 3 bbls H2O
MIR 5x 60:40:4 for part hole
MIR 125 sk class A + 10% salt + 5% Kolseal shut down
wash pump + lines, Release plug
pump 67 1/2 bbls 2% KCL disp. Trouble sucking H2O
from Rig tank ran dry. 3 bpm. bumping 500psi
to 1000psi plug shell

SERVICE
 DEPTH OF JOB 4200'
 PUMP TRUCK CHARGE 2011 00
 EXTRA FOOTAGE @
 MILEAGE 35 @ 7.00 245.00
 MANIFOLD @
 @
 @

CHARGE TO: Pickrell Drilling
 STREET _____
 CITY _____ STATE _____ ZIP _____

TOTAL 2256.00

PLUG & FLOAT EQUIPMENT
4 1/2
 1-Afu insert 100.80
 1-Rubber Plug @ 62.00
 6-centralizers @ 30.80 184.80
 @
 @
 @

To Allied Cementing Co., LLC.
 You are hereby requested to rent cementing equipment

Company **Pickrell Drilling Company, Inc**
 Address **100 South Main, Suite 505**
 CSZ **Wichita, KS 67202**
 Attn. **Jerry Smith**

Lease Name **Young A**
 Lease # **2**
 Legal Desc **C NE SE**
 Section **12**
 Township **30S**
 County **Kingman**
 Drilling Cont **Pickrell Drilling #1**

Job Ticket **3414**
 Range **8W**
 State **KS**

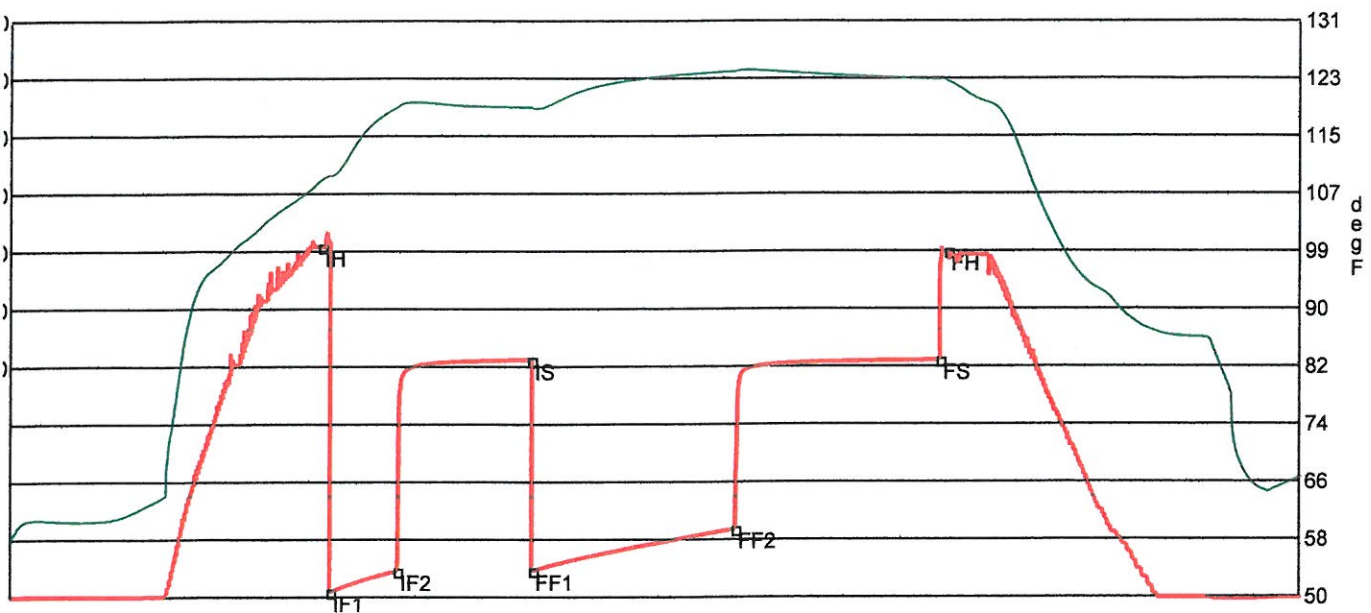
Comments **Field: Spivey-Grabs-Basil**

GENERAL INFORMATION

Test # 1	Test Date	2/19/2011	Chokes	3/4	Hole Size	7 7/8
Tester	Jimmy Ricketts		Top Recorder #	11027		
Test Type	Conventional Bottom Hole		Mid Recorder #			
	Successful Test		Bott Recorder #	w1023		
# of Packers	2.0	Packer Size	6 3/4	Mileage	128	Approved By
Mud Type	Gel Chem			Standby Time	0	
Mud Weight	9.4	Viscosity	42.0	Extra Equipmnt	Jars & Safety Joint	
Filtrate	10.2	Chlorides	5500	Time on Site	10:00 AM	
Drill Collar Len	0			Tool Picked Up	11:30 AM	
Wght Pipe Len	0			Tool Layed Dwn	8:00 PM	
Formation	Kansas City Hertha		Elevation	1482.00	Kelley Bushings	1492.00
Interval Top	3795.0	Bottom	3824.0	Start Date/Time	2/19/2011 11:04 AM	
Anchor Len Below	29.0	Between	0	End Date/Time	2/19/2011 8:33 PM	
Total Depth	3824.0					
Blow Type	Weak blow building to strong blow 12 minutes into initial flow period. Weak blow building to strong blow 20 minutes into final flow period. Times: 30, 60, 90, 90.					

RECOVERY

Feet	Description	Gas	Oil	Water	Mud
680	Heavy mud cut water	0% 0ft	0% 0ft	93% 632.4ft	7% 47.6ft
DST Fluids		290000			



	Date	Time	Pressure	Temp	
IH	2/19/2011 1:20:20 PM	2.272222	1822.076	108.734	Initial Hydro-static
IF1	2/19/2011 1:24:30 PM	2.341667	25.666	109.191	Initial Flow (1)
IF2	2/19/2011 1:54:10 PM	2.836111	133.741	118.899	Initial Flow (2)
IS	2/19/2011 2:53:20 PM	3.822222	1233.705	118.817	Initial Shut-In
FF1	2/19/2011 2:54:00 PM	3.833333	137.257	118.658	Final Flow (1)
FF2	2/19/2011 4:23:20 PM	5.322222	351.109	123.849	Final Flow (2)
FS	2/19/2011 5:53:40 PM	6.827778	1229.119	122.769	Final Shut-In
FH	2/19/2011 5:57:10 PM	6.886111	1795.2	122.529	Final Hydro-static

FLOWES

to IFP Min Into FFP Gas Flows Pressure Choke

Company **Pickrell Drilling Company, Inc**
 Address **100 South Main, Suite 505**
 CSZ **Wichita, KS 67202**
 Attn. **Jerry Smith**

Lease Name **Young A**
 Lease # **2**
 Legal Desc **C NE SE**
 Section **12**
 Township **30S**
 County **Kingman**
 Drilling Cont **Pickrell Drilling #1**

Job Ticket **3414**
 Range **8W**
 State **KS**

Comments **Field: Spivey-Grabs-Basil**

GENERAL INFORMATION

Test # **2** Test Date **2/21/2011**
 Tester **Jimmy Ricketts**
 Test Type **Conventional Bottom Hole Successful Test**
 # of Packers **2.0** Packer Size **6 3/4**
 Mud Type **Gel Chem**
 Mud Weight **9.4** Viscosity **45.0**
 Filtrate **10.8** Chlorides **5000**

Chokes **3/4** Hole Size **7 7/8**
 Top Recorder # **11027**
 Mid Recorder #
 Bott Recorder # **w1023**
 Mileage **128** Approved By
 Standby Time **0**
 Extra Equipmnt **Jars & Safety Joint**
 Time on Site **6:00 AM**
 Tool Picked Up **7:30 AM**
 Tool Layed Dwn **2:30 PM**

Drill Collar Len **0**
 Wght Pipe Len **0**

Elevation **1482.00** Kelley Bushings **1492.00**

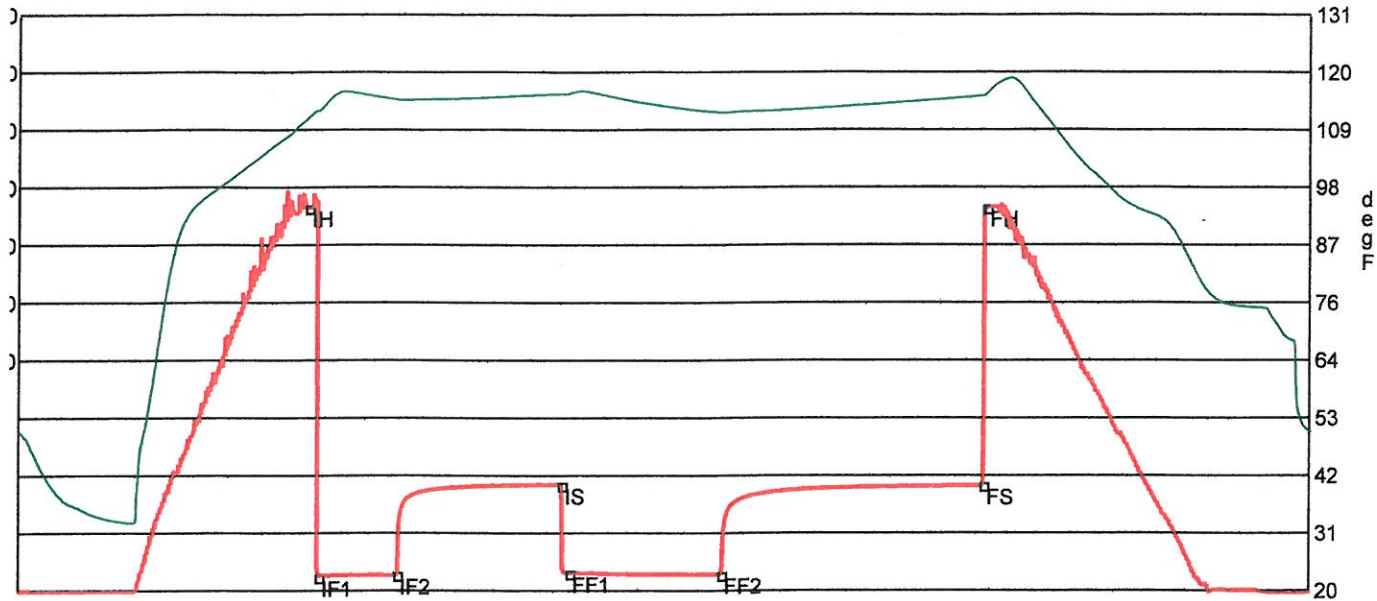
Formation **Mississippian**
 Interval Top **4120.0** Bottom **4140.0**
 Anchor Len Below **20.0** Between **0**
 Total Depth **4140.0**
 Blow Type **Strong blow throughout initial flow period. Strong blow throughout final flow period. Times: 30, 62, 60, 67.**

Start Date/Time **2/21/2011 7:03 AM**
 End Date/Time **2/21/2011 3:03 PM**

RECOVERY

Feet	Description	Gas	Oil	Water	Mud
40	Drilling mud	0% 0ft	0% 0ft	0% 0ft	100% 40ft
65	Heavy water cut mud	0% 0ft	0% 0ft	9% 5.9ft	91% 59.2ft

DST Fluids **42000**



	Date	Time	Pressure	Temp	
IH	2/21/2011 8:48:45 AM	1.7625	1992.911	111.183	Initial Hydro-static
IF1	2/21/2011 8:52:45 AM	1.829167	68.988	112.536	Initial Flow (1)
IF2	2/21/2011 9:22:15 AM	2.320833	80.747	114.596	Initial Flow (2)
IS	2/21/2011 10:24:00 AM	3.35	551.48	115.729	Initial Shut-In
FF1	2/21/2011 10:27:00 AM	3.4	90.728	115.847	Final Flow (1)
FF2	2/21/2011 11:23:15 AM	4.3375	83	112.123	Final Flow (2)
FS	2/21/2011 1:01:30 PM	5.975	546.736	115.336	Final Shut-In
FH	2/21/2011 1:02:45 PM	5.995833	1991.469	115.782	Final Hydro-static

FLOWES

to IFP	Min Into FFP	Gas Flows	Pressure	Choke
0		177.00 mcf	6.50 h2o	1.50 in
0		184.00 mcf	7.00 h2o	1.50 in
0		190.00 mcf	7.50 h2o	1.50 in
10		220.00 mcf	10.00 h2o	1.50 in
20		209.00 mcf	9.00 h2o	1.50 in
30		209.00 mcf	9.00 h2o	1.50 in
40		197.00 mcf	8.00 h2o	1.50 in
50		197.00 mcf	8.00 h2o	1.50 in
60		197.00 mcf	8.00 h2o	1.50 in



JERRY A. SMITH

CERTIFIED PETROLEUM GEOLOGIST

GEOLOGIST'S REPORT

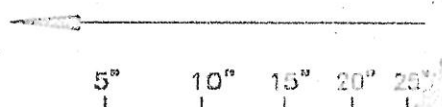
DRILLING TIME and SAMPLE LOG

COMPANY: PICKRELL DRILLING CO., INC		ELEVATIONS	
LEASE: #2 YOUNG "A"		K.B. 1492	
FIELD: SPIVEY-GRABS-BASIL		D.F. 1490	
LOCATION: C-NE-SE		G.L. 1482	
SEC. 12	TWSP. 30	RNG. 8W	Measurements Are All From:
COUNTY: KINGMAN	STATE: KANSAS		KB
CONTRACTOR: COMPANY TOOLS, RIG #1		CASING	
SPUD: 2/11/11	COMP. 2/22/11	SURFACE: 8 5/8" @ 280'	
RTD. 4200'	LTD. 4200'	PRODUCTION: 4 1/2" @ 4200'	
MUD UP: 3103'	TYPE MUD: CHEMICAL	ELECTRICAL SURVEYS	
API No. 15-095-22219		Tucker Wireline: DIL, CNL/FDC	
SAMPLES SAVED FROM: 1300'/2900'		TO: 2300'/RTD	
DRILLING TIME KEPT FROM: 1200'/2900'		TO: 2300'/RTD	
SAMPLES EXAMINED FROM: 1300'/2900'		TO: 2300'/RTD	
GEOLOGICAL SUPERVISION FROM: 1300'/3100'		TO: 2300'/RTD	
GEOLOGIST ON WELL: JERRY A. SMITH			
FORMATION TOPS	LOG	SAMPLES	
HERRINGTON	1347 (+145)	1348 (+144)	
INDIAN CAVE SS.	2161 (-669)	2162 (-670)	
WABAUNSEE	2199 (-707)	2201 (-709)	
HEEBNER	3135 (-1643)	3134 (-1642)	
STALNAKER SS.	3265 (-1773)	3267 (-1775)	
LANSING	3352 (-1860)	3353 (-1861)	
STARK	3762 (-2270)	3764 (-2272)	
MISSISSIPPIAN	4106 (-2614)	4106 (-2614)	

LEGEND

Anhydrite	Salt	Sandstone	Shale	Carbonaceous	Limestone	Oolitic Limestone	Chert	Dolomite

DRILLING TIME IN MINUTES PER FOOT
Rate of Penetration Increases



DEPTH	LITHOLOGY	SAMPLE DESCRIPTIONS	REMARKS

GAS DETECTOR BY
JUMPING LEAF, LLC

DST'S (2) BY RICKETTS

MUD BY MUD-CO

S.H.T.'S:

285' 1°
 381' 1°
 1302' 1 1/4°
 1579' 3/4°
 2205' 1/2°
 2728' 3/4°

1200

20

40

60

80

1300

20

40

60

80

Any w/ G₁, G₂, Ro Sn.

Any w/ G₁, G₂, Ro Sn.

Any w/ G₁, G₂, Ro Sn.

Any w/ G₁, G₂, Ro Sn.

Any w/ G₁, G₂, Ro Sn.

ANY F. SN - AA w/ TR, MBY,
 EX. DSE, EX. Dolo/Dolo
 EX. NVP. NS.

HERRINGTON

1348 (+144) SMPL
 1347 (+145) LOG

KRIDER

1362 (+130) SMPL
 1361 (+131) LOG

AA.

AA.

Dolo - M. G. EX. DSE

1400

SH - Gy, Gn, Rd.

Dolo - M Gy, FX, DSE.

SH - Gy, Gn, Rd.

WINFIELD
1423 (+69) SMPL
1420 (+72) LOG

Dolo - M Gy, FX, DSE. w/
ABD Gy, Gn, Rd, SH.

MUD @ 1434':
9.5 WT, 29 VIS, N/C FILT
83,000 CHLOR, 0 LCM

Dolo - M Gy, FX, DSE.
SH.

Lm - M - DK Gy, FX, DSE.
w/ ABD DK Gy, Gn,
Rd SH.

Lm, DK Gy, FX, DSE. w/
ABD Lm Gy, Gn, Rd SH.

PRDOM Gy, Gn, Rd SH w/ DK
Gy, FX, DSE Lm.

TOWANDA
1490 (+2) SMPL & LOG

50-50 Lm & SH - AA.

1500

50-50 Lm & SH - AA.

50-50 Lm & SH - AA.

Lm & SH - AA. Su. In. Lm SH.

PRDOM Gy, Gn, Rd SH w/
SCAT DK Gy, FX, DSE Lm.

FT. RILEY
1542 (-50) SMPL
1540 (-48) LOG

SH w/ SCAT Lm - AA.

50-50: Lm - M - DK Gy, FX,
DSE. SH. Gy, Gn, SCAT
Rd.

Lm & SH - AA. Su. In. Lm SH.

SH & SCAT Lm - AA.

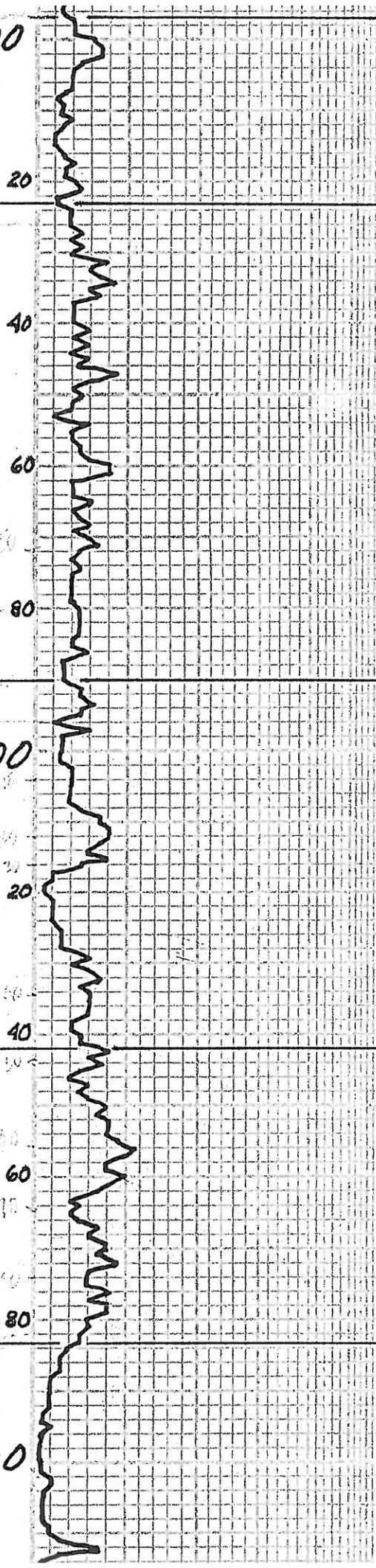
FLORENCE
1583 (-91) SMPL & LOG

CNT - Lm - M Gy, DSE, SH, SML,
DSE. w/ ABD W/ CNT.

CNT - AA.

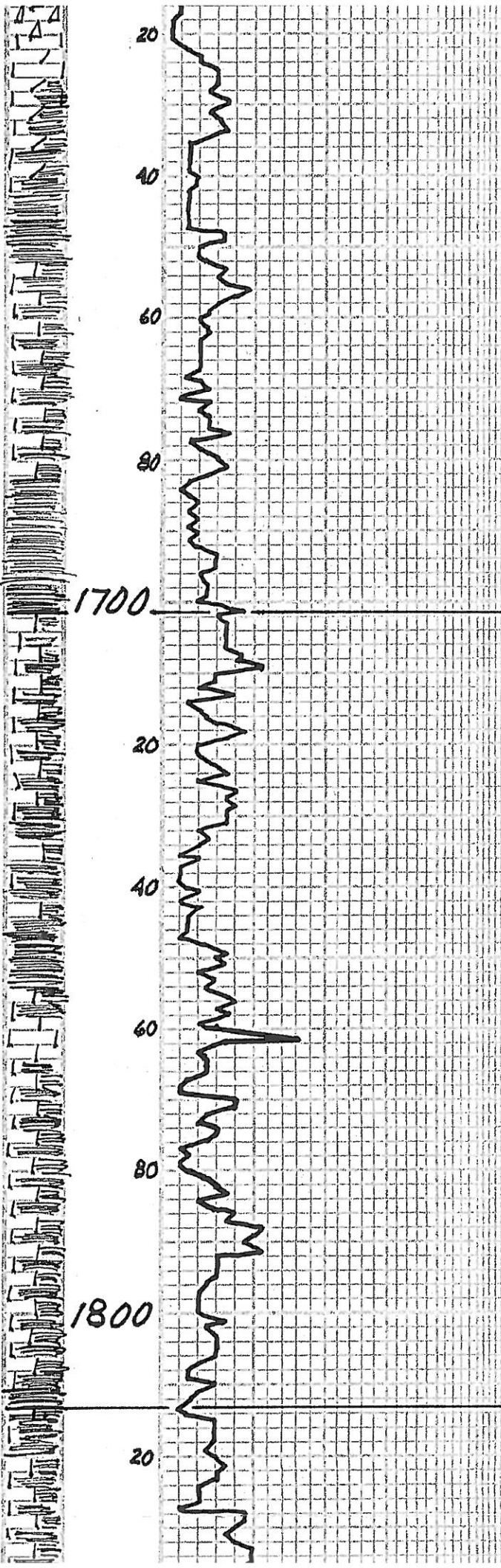
CNT - AA.

1600



Handwritten geological descriptions and notes in the right column, detailing lithology and well conditions for various depths.

Printed labels for well locations and sample logs: WINFIELD, TOWANDA, FT. RILEY, and FLORENCE, with associated sample numbers and log identifiers.



Ln/Dolo - Lt. M, DK Gy.
 FX, DSE, TR, WA, CHK.
 w/ ABD Gy, Gn, Ro, SH.

Ln/Dolo & SH-AA.

PREDOM SH-M → DK Gy,
 Gn & Ro.

Ln-Lt Gy, FX, DSE, w/ ABD
 Gn & Ro, SH.

Ln & SH-AA.

PREDOM SH-Gy, Gn, Ro.

SH-AA w/ SCATT Lt Gy, FX,
 DSE Ln.

SH-Gy, Gn, Ro. Calc.

SH-AA w/ INC IN COM Lt Gy,
 FX, DSE → SUB-CHKY 2m.

Ln-Lt → M Gy, FX, DSE, w/
 SH-Gy, Gn, Ro.

Ln & SH-AA w/ INC IN SH.

PREDOM SH-Gy, Gn, Ro. w/
 SCATT Lt Gy, FX, DSE → SUB-
 CHKY Ln.

SH & Ln-AA.

PREDOM DK, Ro, SH, w/ SCATT
 Gy, Gn, SH & Lt Gy, FX, DSE
 Ln.

Ln-Lt → M Gy, FX, DSE, w/
 SCATT Gy, Gn, Ro, SH.

Ln & SH-AA.

Ln & SH-AA. See Inc In SH.

Ln-Lt Gy, FX, DSE, w/ Gy,
 Gn, Ro, SH.

Ln & SH-AA. See Inc In SH.

PREDOM Gy & Gn, SH, TR
 Ro, SH, SCATT Ln-AA.

Ln-Lt → M Gy, FX, DSE,
 w/ Gy, Gn, Ro, SH.

WREFORD
 1701 (-209) SMPL
 1700 (-208) LOG

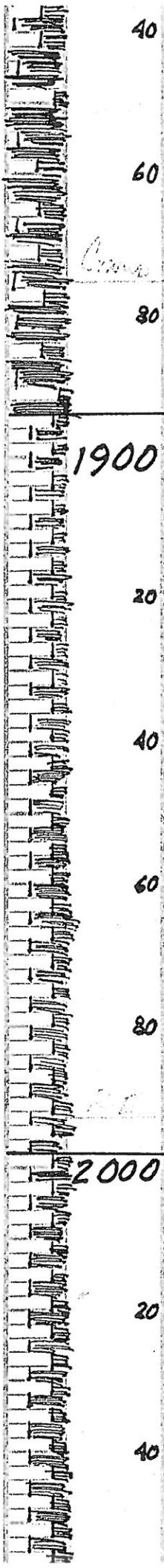
BADER
 1813 (-321) SMPL
 1810 (-318) LOG

1700

1800

20
40
60
80
100

20



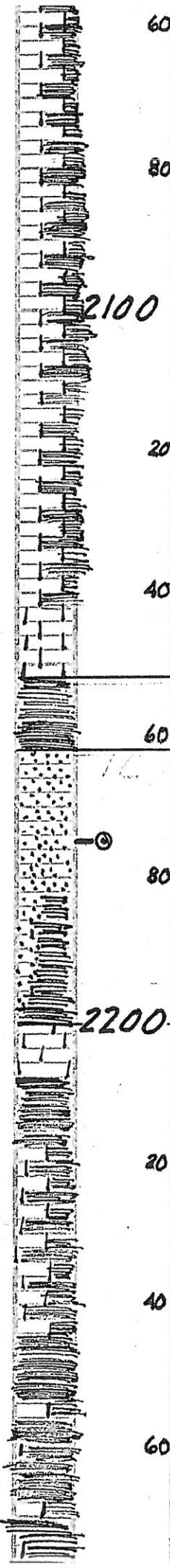
40
60
80
1900
20
40
60
80
2000
20
40

LM_g SH-AA.
 PREDOM SH-GY, GN, RD. w/
 SCAT LM-LT GY, FX, DSE.
 SH-AA w/TR LM-AA.
 SH_g LM-AA.
 SH_g LM-AA. INC IN LM.
 SH-GY, GN, RD. w/LM-LT GY,
 FX, DSE.
 PREDOM SH-GY, GN, RD. w/
 SCAT LM-LT GY, FX, DSE LM.
 LM_g SH-AA.
 LM_g SH-AA. INC IN LM.
 LM_g SH-AA.
 LM_g SH-AA.
 PREDOM LM-LT-GY, GN, FX.
 SCAT LM-LT GY, FX, DSE w/SH-
 GY, GN, RD.
 LM_g SH-AA.
 LM_g SH-AA.
 LM_g SH-AA. SH INC IN SH.
 PREDOM SH-DK GY, GN, RD.
 SCAT LM-LT GY, FX,
 DSE.
 SH-DK GY, GN, RD. w/LM-LT-
 GY, GN, FX, DSE.
 LM_g SH-AA.
 LM_g SH-AA.
 SH INC IN SH.
 SH-GY, GN, RD. w/LM-LT-
 GY, GN, FX, DSE.
 PREDOM SH-GY, GN, RD. w/
 LM-AA.

BIT TRIP @ 1848'

COTTONWOOD
 1894 (-402) SMPL
 1891 (-399) LOG

RED EAGLE
 1998 (-506) SMPL & LOG



60
80
2100
20
40
60
80
2200
20
40
60

Sh $\frac{1}{2}$ / M - AA. See loc 14
 Sh $\frac{1}{2}$ Lm - AA.
 Sh - DR Gy, Gy - Gn, Rd. w/ Lm
 Cr - M Gy, FX, DSE.
 Sh $\frac{1}{2}$ Lm - AA. Inc In Sh.
 Sh $\frac{1}{2}$ Lm - AA. Inc In Sh.
 Sh - DR Gy, Gy - Gn, Gn, Rd.
 Sh - AA.
 Lm - Cr Gy, FX, DSE. Scat
 Sh - AA.
 Lm - Cr Gy, FX, DSE.
 Sh - DR Gy, Gy - Gn.
 Sh - M Gy, VFG, Cr, Qtz, WRD,
 W. Sst, Hx, Mx, Fx, Pr
 - Fr. B. N.S.
 Sh - AA. No Sst's.
 Sh - AA. No Sst's.
 Inc In Gy, Gn Sh. TA - So
 AA.
 Lm - Cr - M Gy, FX, DSE.
 Lm - AA. w/ Scat DR Gy, Gy -
 Gn Sh.
 50/50 Lm & Sh - AA.
 AA Lm & Sh.
 Predom Sh - DR Gy, Gy - Gn,
 Rd. w/ TR M Gy, FX, DSE
 Lm.
 Sh - / TA Lm - AA.
 Sh - / TR Lm - AA.

ONAGA SH.
2152 (-660) SMPL & LOG

INDIAN CAVE SAND
2162 (-670) SMPL
2161 (-669) LOG

WABAUNSEE
2201 (-709) SMPL
2199 (-707) LOG

2300

2900

3000

80
20
40
60
80
20
40

SN - DR Gy, Gy-GN, Rd w/ SN
INC IN LF Gy, FX, DSE LM

MUD @ 2327':
9.7 WT, 30 VIS, N/C FILT,
60,000 CHLOR, 0 LCM

LM - GRM, FX, SCAT, FR
KGY, NS, 72, W/N,
CHRY SA

LM - AA. INC IN Gy, GN, Rd
SN

LM of SN - AA.

LM of SN - AA.

LM of SN - AA.

LM of SN - AA.

LM - AA. w/ SN DSE IN SN

LM - GRM, LF, Gy, FX, Foss
by DSE, No Vis, Rd.
w/ SCAT, SN, Gy, GN, Rd.

LM of SN - AA. INC IN SN

LM - GRM, LF, M Gy, FX, Foss
DSE, No Vis, Rd.
w/ ADD Gy, GN, SN

LM of ADD SN - AA

ADD DR Gy, DR Rd, SN

SN - M - DR Gy, DR Rd, GN
GN, w/ SCAT, GRM, LF
Gy, FX, DSE LM

SAMPLES V. POOR -
RD, Gy, GN, SN

3100

3200

60
80
20
40
60
80
20
40
60

Inc. In LM - CRM, Lt. GR
FX, DSE. SAMPLES LIKE
POWDER.

50-50 LM & SH-AA

LM - CRM, Lt. GR, FX, FASS
DSE. → SCATT PR

SH - DK GR, GR-BN.

SH - BLK, CARB.

LM - Lt. GR, FX, DSE.

SH - DK GR.

LM - Lt. → M. GR, FX, DSE.

SH - BLK, CARB.

LM - Lt. GR, FX, DSE.

SH - DK GR, GR-BN.

LM - CRM, Lt. GR, FX,
DSE. CHKY.

LM - CRM, Lt. GR, FX,
DSE. CHKY.

SH - M. GR, SILTY IN PT.
TR. MIC. SCATT BLK
& RD SH.

SH - AA, SCATT CRM, FX,
DSE LM.

SH - M. GR, SILTY IN PT.
SILTY IN PT.

SH - AA.

SH - AA.

SH - AA.

SH - AA.

SH - AA.

SH - AA.

SH - AA.

HEEBNER
3134 (-1642) SMPL
3135 (-1643) LOG

STALNAKER

20 U GAS 3270-90
25 U GAS 3290-3330

S_D = M Gy Gy - GN. V.F.G.
W.R.D. W. SAT. HAR. MIC.
HD. TITE.

S_D = AA.

S_D = AA.

S_D = AA.

S_D = AA.

S_D = M → DK Gy. VEG
W.R.D. W. SAT. MIC. HD.
TITE.

S_D = AA.

S_H = [redacted] M → DK Gy. Gy
GN. SAT. IN
PT.

LANSING
3353 (-1861) SMPL
3352 (-1860) LOG

L_M = GM. G. → M Gy. FX.
DSE. CNKY. NVP.

L_M = GM. SUB - CNKY → CNKY
L_M = M Gy. FX. DSE.

L_M = AA.

L_M = AA.

L_M = W. FX. SUB - CNKY. FOS
L_M = M Gy. FX. DSE. NVP. W. TA
L_M = M Gy. FX. DSE. L_M.

L_M = AA.

L_M = AA.

L_M = AA.

L_M = AA. SHKY.

L_M = G. Gy. FX. DSE.

S_H = DK Gy. Gy - GN.

L_M = GM. L_M Gy. FX. SPS
or FOS. DSE.

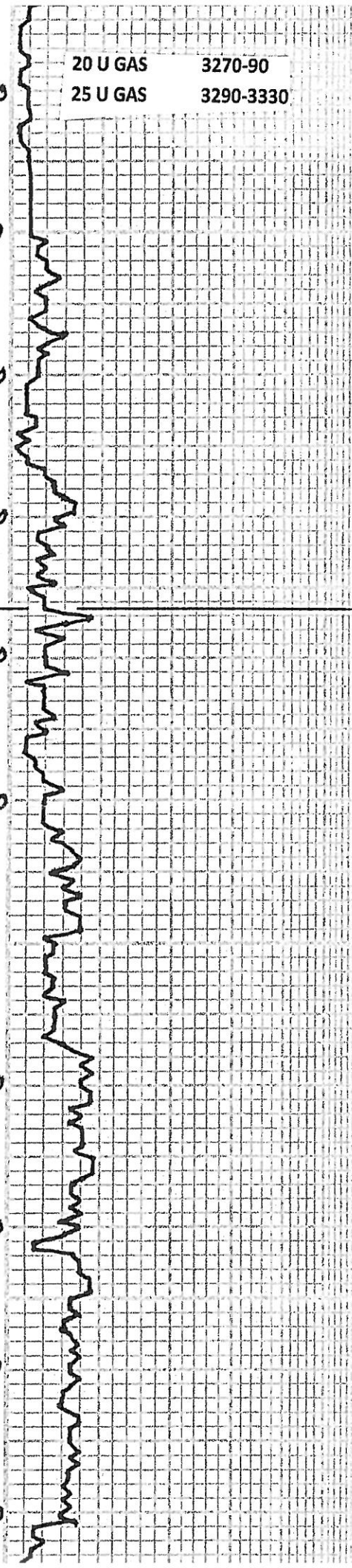
L_M = AA.

L_M = W. CNKY → L_M Gy.

3300

3400

80
20
40
60
80
20
40
60
80



IF: WK TO STR BLO IN 12 MIN.
 ISI: NO BB
 FF: WK TO STR BLO IN 20 MIN.
 FSI: NO BB

REC: 680' SMCW

SIP'S: 1234 - 1229#
 FP'S: 25-134/137-351#
 HP'S: 1822-1795#
 BHT: 124° F

STARK
 3764 (-2272) SMPL
 3762 (-2270) LOG

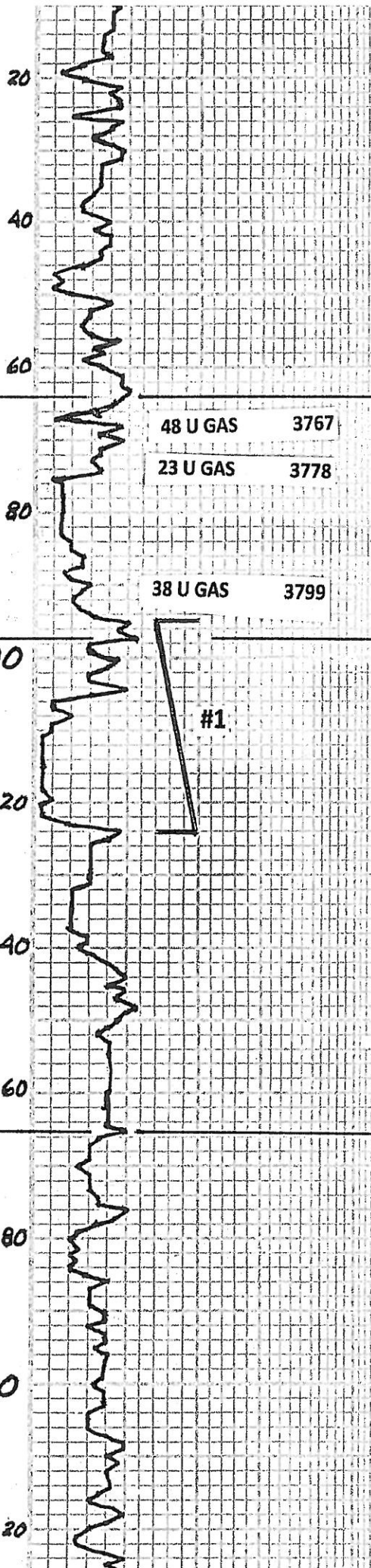
HUSHPUCKNEY
 3797 (-2305) SMPL
 3794 (-2302) LOG

MUD @ 3824':
 9.4 WT, 42 VIS, 10.2 FILT,
 550 CHLOR, 0 LCM
 PIPE STRAP @ 3824:

3848.63 STRAP
 3848.38 BOARD
 0.25 LONG

BASE KANSAS CITY
 3865 (-2373) SMPL
 3863 (-2371) LOG

MUD @ 3913':
 9.4 WT, 55 VIS, 10.8 FILT,
 6000 CHLOR, 0 LCM

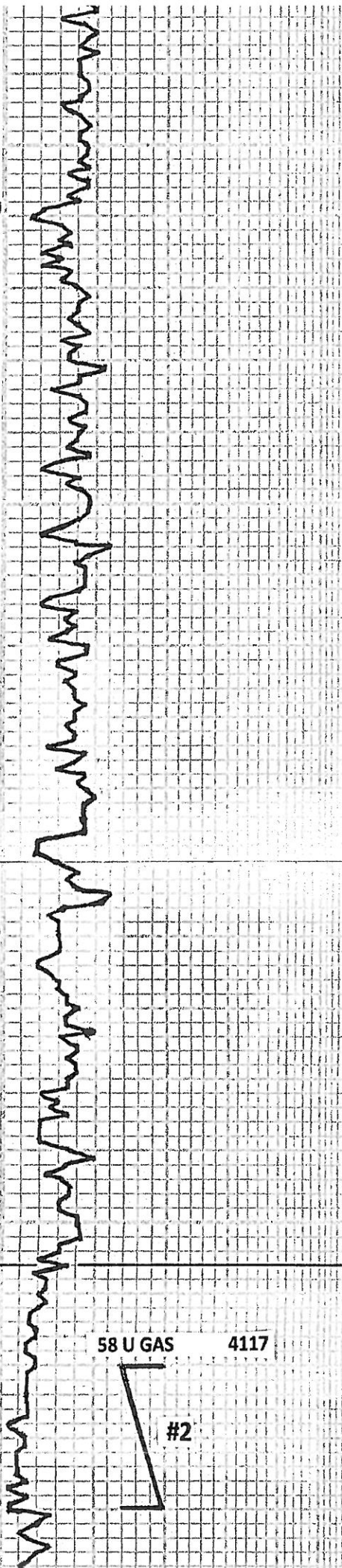


48 U GAS 3767
 23 U GAS 3778
 38 U GAS 3799

DOOR. NO VIS SHG.
 LM - GRM. SUB-GHY + LCM
 W/TA. DSE. NO OOR. NS.
 W/TA. LUT - GY, OOR, SHP,
 DSE.
 LM - AA. SCAT. FR. VG. G.
 PAETING OOR. NO VIS
 SHG.
 LM - M GY. TA. FX. DSE.
 LM - GRM. GY. TA. FX. PR. FR.
 VGY G. NO OOR. NS.
 LM - GRM. TA. GY. FX. DSE.
 SH. 100 IN. SH.
 LM - AA.
 SH - BLK, CARB.
 LM - GY. TA. FX. DSE. W/
 CNT - GY, OOR, SHP, DSE.
 LM - GRM. GY. TA. FX. SCAT
 PR. VGY G. NS.
 LM - GRM, GY. TA. FX.
 DSE.
 SH - BLK, CARB.
 LM - L. GY. FX. DSE. W/
 ADD. L. GY. GY. GN. SH.
 LM - M GY. FG. HX. OORADIA.
 V. STR. OOR. V. GA. BR. GHT.
 V. ALL. FLOR. V. SH. SH. FO. F
 GAS.
 LM - M - DK. GY. FX. DSE.
 OORADIA. IN. PR.
 SH - DK. GY.
 LM - L. - M GY. FX. DSE.
 SH. 90 IN. SH. ADD.
 GY. GY. GN. SH.
 SH - M - DK. GY. GY. GN.
 DK. MAROON. W/ SCAT. LM
 AA.
 SH - AA. W/ SCAT. LM - AA.
 SH - AA. SCAT. PYRITE.
 SH - M - DK. GY. GY. GN. GN.
 DK. MAROON. CAMBODIA.
 SH - BLK, CARB.
 SH - DK. GY. GY. GN. DK. MAROON.
 LM - M - DK. GY. FX. FASS. PR.
 DSE. - SCAT. PR. VGY G.
 NS.
 LM - AA.
 SH - M - DK. GY. GY. GN.
 GN.
 LM - M GY. FX. DSE. SUB-
 GNY. IN. PR.
 SH - BLK, CARB.



40
60
80
4000
20
40
60
80
4100
20
40



LM - LF - M - DK Gy. FX. DSE.
SUB-CENT IN FT.

LM - LF - M - DK Gy. FX.
DSE.

LM - AA.

SH - BLK, CARB.

LM - MGY, FX. DSE. SPSLY
FOSS.

SH - DK Gy, Gy - GN.

LM - LF - M Gy. FX. DSE.
SPSLY FOSS.

LM - AA w/ H.C. IN M - DK Gy.
Gy - GN SH.

SH - BLK, CARB.

LM - M Gy. FX. DSE.

SH - M - DK Gy, Gy - GN, DK
RD.

LM - MGY, FX. DSE.

SH - BLK, CARB.

LM - LF - MGY, FX. DSE.
Gy - GN SH.

LM - AA w/ ADD SH - AA.

SH - M - DK Gy, Gy - GN, DK
RD. CANG IN FT.

SH - BLK, CARB.

SH - M - DK Gy, Gy - GN,
DK RD.

SH - BLK, CARB.

SH - M - DK Gy, Gy - GN,
DK RD. CANG IN FT.

SH - BLK, CARB.

SH - M - DK Gy, Gy - GN,
GN, RD.

SH - AA.

SH - AA w/ TR. WH. OPA.
SHP. DSE. CNT. No VIS
P. AS

CNT - WH. OPA. SHP. DSE.
TRIP IN FT. No VIS. No
ODOR. No

CNT - WH. OPA. SHP. DSE.
TRIP IN FT. No VIS. No
ODOR. No

CNT - WH. OPA. SHP. DSE.
TRIP IN FT. No VIS. No
ODOR. No

MISSISSIPPIAN
4106 (-2614) SMPL & LOG

108 U GAS 4127

200 U GAS 4140

MISSISSIPPI LIME
4156 (-2664) SMPL
4155 (-2663) LOG

MUD @ 4140':
9.4 WT, 45 VIS, 10.8 FILT,
5000 CHLOR, 0 LCM

TOTAL DEPTH
4200 (-2708) ROTARY & LOG

DST #2: 4120 - 40 (ROTARY)
30-60-60-90
IF: STR BLO. BOB IMMED.
GTS IN 6 MIN.
GAS GAUGES
10" 177 MCF
20" 184 MCFPD
30" 190 MCFPD

ISI: NO BB
FF: STR. BLO. BOB IMMED.
GTS IMMED.
GAS GAUGES
10" 220 MCFPD
20" 209 MCFPD
30" 209 MCFPD
40" 197 MCFPD
50" 197 MCFPD
60" 197 MCFPD

FSI: NO BB
REC.: 40' DM
65' VSWCM
(9% W, 91% M)
42,000 CHLORIDES

SIP'S: 551-547#
FP'S: 69-81/91-83#
HP'S: 1993-1991 #
BHT: 119° F

WR ODR.
CMT - AA. Hx Wca. No FO.
WR -> ER ODR.
CMT - Wh. Lc - M. By Opa
DVT. PAF. WBA. GIP
BKI. DEAD. STN. No FO.
ER ODR.
CMT - Wh. Fash. Opa. SMP
DSE. J. J. W. W. W.
J. J. J. J. J. J.
CMT - AA.

